As mentioned in the introduction, Superfund distinguishes between short-term and long-term responses to threats posed by hazardous substances. Long-term responses, called remedial actions, involve complex and highly contaminated sites that often require several years to fully study the problem, develop a permanent remedy, and clean up the hazardous waste. This section focuses on such sites.

As sites are identified, cleaned and completed, potential reuse is always considered. Region III has one of the most aggressive programs in the nation to promote reuse of sites by protecting prospective purchasers, lenders and property owners from Superfund liability. Region III has entered into 25 Prospective Purchaser Agreements (PPAs), assuring these buyers will not be responsible for cleaning sites where they did not contribute to the contamination.

Superfund cleanups are complex projects that require the concerted efforts of EPA, state and local partners, community members and parties responsible for the contamination of the sites. The following recent case studies demonstrate the range of activities in Maryland.

Once the location of a solvent recycling plant, the Galaxy/Spectron Site in Elkton was notorious for decades for allowing contaminants to enter nearby Little Elk Creek. Today, Region III works closely with the responsible parties to develop unique cleanup solutions, including a massive stream restoration project that involved diverting the stream, excavating the stream bed, covering the stream bed with a chemical-resistant liner, and installing an innovative drain system under the liner to treat the contaminated



Galaxy/Spectron Site, Cecil County: Massive stream restoration process begins.



Galaxy/Spectron Site: Installing an innovative drainage system to treat contaminated water.



Galaxy/Spectron Site: Covering the stream bed with a protective liner.



Bush Valley Landfill, Harford County: Once caused air and groundwater contamination along the edge of a valuable wetland.



Bush Valley Landfill: Thanks to a massive cleanup effort, this site will be redeveloped into a greenspace and wildlife habitat.

water. The state-of-the-art treatment system, which started up this Spring, is a crucial step towards fully restoring Cecil County's natural habitat. Neighbors now look forward to the site's potential redevelopment into a local park.

While extensive projects like this stream restoration symbolize the culmination of productive partnerships and hard work, selecting remedies that foster redevelopment is often the ultimate success story. We're proud of the following achievements and hope to extend reuse successes to many more sites.

Not only did the Bush Valley Landfill receive tons of hazardous wastes for almost a decade but its owners were also discovered to be in frequent violation of their permit. The result? A blight to the local community that caused air and groundwater contamination along the edge of a valuable wetland. After conducting in-depth studies of the problem, EPA recently approved the design of a landfill cover that will prevent further contamination. The Agency also oversaw the

design of a gas management system, and will ensure that reqular environmental monitoring is conducted. Once the protective cover is in place and seeded with grass and native wild flowers, it will provide a valuable green space and wildlife habitat. It will also serve as a buffer between nearby developed areas and the adjacent wetland.

Used for years as a wood-treating facility, the soils, groundwater and stream near the Southern Maryland Wood Treating Site in St. Mary's County were left severely contaminated when the owners abandoned the site in the early 1980s. Not only did they leave behind old processing equipment and deteriorating tanks of hazardous wastes but they also left a potential health threat for community members living within a mile of the site. This story has a happy ending, however, as cleanup enters the 'home stretch.' As contaminated soils are treated through an onsite thermal process 24 hours a day, EPA expects this former eyesore to be clean and ready for redevelopment by the close of this year.

Due to Superfund administrative reforms, EPA has become more flexible in updating remedies. Region III has changed 52 cleanup decisions when advancements in technology can assure an alternate safe and effective cleanup. The cost savings in the Mid-Atlantic states are tremendous, totaling about \$180 million so far. At the Woodlawn Landfill, EPA changed the original cleanup decision to address the fact that natural soil degradation processes were found to effectively reduce groundwater contaminants that have plagued this site. The modified remedy, which combines the natural degradation processes with a protective soil cover, will provide the same level of protection to human health and the environment, while saving up to \$10 million.



Woodlawn County Landfill, Cecil County: Collecting soil samples.

Nationwide, EPA has completed cleanup construction at 680 sites on the National Priorities List, and with appropriate funding is committed to cleaning 170 more by 2002.

In the Mid-Atlantic states, we're focused on post-construction activities as well, conducting regular five-year reviews on approximately 150 sites to ensure the remedies remain protective and monitoring all sites where long-term groundwater cleanup is being performed.



Woodlawn County Landfill